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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

THAI, XUAN MARIAN

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/749,795

Applicant(s)

JEONG ET AL.

Examiner

XUAN M. THAI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-3 and 8-11 is/are rejected.
7) ☒ Claim(s) 4-7 and 12-14 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. This is in response to amendment filed on December 15, 2003. Claims 1-6 and 8-14 have been amended. Claims 1-14 remain pending in the instant application.
2. Proposed corrected drawing (fig. 1) filed on December 15, 2003 has been approved by the examiner.
3. Rejection of claims 1-14 under 35 U.S.C 112, 2nd paragraph, is withdrawn due to the amendment to the claims filed on December 15, 2003. However, new rejections are raised below with respect to claim 9.
4. Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. As per claim 9, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 8 recites the broad recitation "storing and

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managing the input data received from a matched input port”, and the claim also recites “receiving an input data from the input port matched thereto” which is the narrower statement of the range/limitation.

6. Claims 10 and 11 are dependent on claim 9, therefore, they also inherent the deficiencies of claim 9. Thus, they are being rejected under the same rationale as claim 9.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (USPN 5,838,937; Lee).

As per claim 1, Lee disclose an input buffered switch system (figs. 1 and 2) comprising: at least one input data buffering means (100/130); arbitration means (300); and switching means (200) [Abstract; see figs. 1-4; col. 2, lines 26-52].

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9. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Dally et al. (20010038634; Dally).

As per claim 1, Dally disclose an input buffered switch system (fig. 9) comprising: at least one input data buffering means (62); arbitration means (68); and switching means (66) [see para [0066] – [0070]; see figs. 9, 10A and 10B].

10. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Pannell (6,510,138).

As per claim 1, Pannell disclose an input buffered switch system (fig. 2) comprising: at least one input data buffering means (RX0...RX23); arbitration means (22); and switching means (12) [see fig. 2; col. 4, lines 1-42].

11. Claims 1-3 and 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Chao et al. (6,449,283; Chao).

As per claim 1, Chao disclose an input buffered switch system (fig. 9) comprising: at least one input data buffering means (910a-910d); arbitration means (figs. 10 and 11); and switching means (920) [e.g. see figs. 9-13; cols. 15, lines 39 et seq. bridging col. 19, lines 1-12].

As per claim 2, Chao disclose input data buffering means comprising: at least one first input information storing means (figs. 9, col. 15, lines 42-45); at least one second input information storage means (figs. 9, col. 15, lines 42-45); an input information control means (910; col. 17, lines 22-48).

As per claim 3, Chao disclose input data buffering means further comprises: means for transmitting the arbitration request signal (e.g. 1390; fig. 13; col. 18, lines 30-60); means for

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shifting existing cell address information (e.g. 1340; figs. 13, 14a, 14b, 14c, 14d and 14e; cols. 18 – 20); means for storing sequentially the existing cell address information (e.g. 1350; fig. 13; cols. 18-19); and means for changing information on data to be processed (col. 19-20, lines 1-15).

As per claim 8, Chao disclose a method for processing input data adapted to a distributed-type input buffer switch system, the method comprising steps of: storing and managing the input data received from a matched input port (input queues; fig. 9); transmitting an arbitration request to an arbitration means (fig. 11, col. 16, lines 20-32); managing the arbitration request signal according to the input data buffering means and a target output port (fig. 11, col. 16, lines 21-32); performing arbitration and processing the input data (col. 16, lines 23-37; fig. 13, col. 18, lines 28-52).

As per claim 9, Chao discloses storing and managing input data by a corresponding first input information storing means according to the target output ports (col. 19, lines 58 et seq.).

Allowable Subject Matter

12. Claims 4-7 and 12-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claims 10 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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14. The following is a statement of reasons for the indication of allowable subject matter: Applicants claimed additional buffering means in an arbitration circuit to buffer data from input ports (claims 4-7) and specific details of arbitration method as cited in claims 12-14 which are not taught by the prior art of record.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to XUAN M. THAI whose telephone number is 703-308-2064. The examiner can normally be reached on Monday to Friday from 8:30 A.M. to 5:00 P.M..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


XUAN M. THAI
Primary Examiner
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XMT